The Society then proceeded to ballot for candidates for membership.

The letters read this evening from the Baron Von Hammer Purgstall, and from the Albany Institute, relative to an exchange of publications with this Society, were referred to the Librarian, with power to act.

The consideration of the Amendments to the Laws of the Society, reported from the Committee on that subject, was, on motion of Judge Kane, postponed to the next stated meeting.

All other business having been concluded, the ballot boxes were opened, and the following named gentlemen were declared by the presiding officer to be duly elected members of the Society:

A. L. Crelle, of Berlin.
C. F. Gauss, of Göttingen.
Augustin Cauchy, of Paris.
J. Liouville, of Paris.
Dr. J. G. Flügel, U. S. Consul at Leipsic.
Prof. O. M. Mitchell, of Cincinnati.
Robert M. Bird, M.D. of Philadelphia.
John L. Leconte, M.D. of Philadelphia.
Edward E. Law, of Philadelphia.
Capt. W. F. Lynch, U. S. Navy.
Hon. John P. Kennedy, Secretary of the Navy.
Major Alfred Mordecai, U. S. Army.

Stated Meeting, February 4.

Present, sixteen members.

Judge KANE, Vice-President, in the Chair.

Mr. Edward E. Law, Dr. John L. Leconte, and Mr. John Cassin, recently elected members, were presented to the presiding officer and took their seats.

Letters were read:-

From Major Alfred Mordecai, dated Washington Arsenal, vol. v.—2 v

Jan. 29, 1853; from Edward E. Law, dated Walnut street, 29th Jan. 1853; from John L. Leconte, dated Philadelphia, Feb. 2, 1853,—severally acknowledging the receipt of notice of their election as members of the Society:—

From the Connecticut Historical Society, dated Hartford, Feb. 2, 1853; and from the Academy of Natural Sciences of Philadelphia, dated Feb. 2, 1853, returning thanks for the Proceedings of this Society, No. 48:—

From the Proprietors of the Bowditch Library, dated Boston, Jan. 29, 1853, acknowledging the receipt of the Transactions of this Society, Vol. X. Part 2; and of Nos. 44, 45, 46 of the Proceedings: and—

From Mr. George Parish, dated Ogdensburg, N. Y. 21st Jan. 1853, informing the Society, on the part of the heirs of the late David Parish, that the Society is welcome to remain in possession of the Collection of Coins and Medals deposited with them by said David Parish, with the exception of two pieces, which it is desired should be returned to George Parish.

The following donations were announced:-

FOR THE LIBRARY.

- Biblioteca Maritima Española; obra postuma del Excmo. Señor Don Martin Fernandez de Navarrete, &c. &c. 2 vols. 8vo. Madrid, 1852.—From the Hydrographic Department at Madrid.
- Diccionario Marino: Español-Ingles, y Ingles-Español; para el uso del Colegio Naval. Por Don Juan José Martinez de Espinosa y Tacon, Comandante General, &c. &c. 2 vols. 8vo. Madrid, 1849.—
 From the same.
- Coleccion Completa de Tablas, para los usos de la Navegacion y Astronomia Nautica: por el Capitan Don José de Mendoza y Rios, &c. &c. Madrid, 1850. 4to.—From the same.
- Esplicacion de las Tablas de Navegacion y Astronomia Nautica de Don José Mendoza y Rios. Por Don José Sanchez y Cerquero. Madrid, 1851. 4to.—From the same.
- Almanaque Nautico, y Ephemérides Astronomicas, para los años de 1853 y 1854. Madrid. 8vo.—From the same.
- Combate de Trafalgar. Vindicacion de la Armada Española: Por Don Manuel Marliani, Ex-Senador del Reino. Madrid, 1850. 8vo.—From the same.

- Ordenanzas de Pesca, para los Provincias de Pontevedra y la Coruña, &c. Madrid, 1850. 4to.—From the same.
- Catalogo de las Cartas, Planos, &c. pertenicientes a la Direccion de Hidrografia de Madrid. No. 14. 8vo.—From the same.
- Charts and Maps of the Islands of Teneriffe, Fuerteventura, Lanzarote; the Western Coast of Africa, from Cape St. Paul to Formosa; the Bay of San Juan de Luz; Ria de Vigo; the Ports of Holmes' Hole, Zebu, Laguimanoc and Busainga, Batan, and the Bay of Nin and Mandao.—From the same.
- Monthly Notices of the Royal Astronomical Society. Vol. XII. No. 4. London. 8vo.—From the Society.
- Proceedings of the Boston Society of Natural History. Nov. 1852. Boston. 8vo.—From the Society.
- Proceedings of the Academy of Natural Sciences of Philadelphia. Vol. VI. No. 6. Nov. Dec. 1852. Philadelphia. 8vo.—From the Academy.
- Report of a Geological Survey of Wisconsin, Iowa and Minnesota; and incidentally of a portion of Nebraska Territory; made under instructions from the United States Treasury Department. By David Dale Owen, United States Geologist. With a volume of Illustrations. Philadelphia, 1852. 4to.—From the Hon. H. S. Geyer, U. S. Senate.
- Plans for the Artillery of the United States: drawn and engraved under the direction of Major Alfred Mordecai, of the Ordnance Department. Parts 1 to 13, inclusive.—From Col. H. K. Craig, U. S. Ordnance Department.
- Arte de la Lengua Quichua: por el P. Diego de Torres Rubio, de la Compania de Jesus. Lima, 1700. 12mo.—From Dr. Ruschenberger.
- Reprint of the Original Letters from Washington to Joseph Reed, during the American Revolution, referred to in the Pamphlets of Lord Mahon and Mr. Sparks. By William B. Reed. Philadelphia, 1852. 8vo.—From W. B. Reed, Esq.
- A Tribute to the Memory of Peter Collinson;—with some notice of Dr. Darlington's Memorials of John Bartram and Humphrey Marshall. Second Edition. By William H. Dillingham. Philadelphia, 1852. 8vo.—From the Author.
- Report of the Committee of the House of Representatives of the United States, to whom was referred the Memorial of Dr. W. T. G. Morton, asking remuneration for the Ether Discovery. Washington, 1852. 8vo.—Donor unknown.

The Astronomical Journal, No. 52: Cambridge, Jan. 27, 1852. 4to.—From Dr. B. A. Gould, jr., Editor.

The Plough, the Loom and the Anvil. Vol. V. No. 6. Dec. 1852. New York and Philadelphia. Svo.—From F. G. Skinner, Editor.

Prof. Frazer announced the death of Sears C. Walker, a member of this Society, on the 30th inst. at Cincinnati, in the 48th year of his age.

Remarks upon the scientific labours of Mr. Walker were made by Prof. Frazer and Mr. Justice.

On motion, Prof. Frazer was appointed to prepare an obituary notice of the deceased member.

Mr. Justice offered, for the inspection of the members, a "Crystallotype" of the Moon, taken by John A. Whipple, of Boston, through the great refracting telescope at Cambridge, and presented to Mr. Justice by Marcus A. Root, daguerreotypist of this city.

This picture of the moon, small as it is, being only 5 inches long, by $2\frac{1}{2}$ broad, is so perfectly distinct that all the well known localities on the line of partial illumination, where the shadows are more fully projected, can be easily recognised.

In tracing this line from north to south, we notice on the dark plain of Mare Imbrium, the fully developed ring-mountains of Archimedes, Aristillus and Autolycus, with the whole group lying within the curve of the Apennines, whose dark shadows are contrasted with the enlightened side of the range. Continuing on nearly the same meridian, south of the equator, the large circular expanse of Ptolemy, united to Alphons, and Arzachel with its central hills, are all finely indicated; while Hipparchus, Thebit, and the surrounding pit-formations which exist throughout these mountain regions, form almost as beautiful a display as when viewed through the telescope. The effect is much increased when the picture is viewed through a low magnifying power.

When we consider the small number of persons who have the opportunity of examining the moon through a good telescope, we are able more fully to appreciate an art which can thus so graphically transfer the likeness of this planet from the heavens to a parlour table, for the convenience of our investigations in the study of selenography. Mr. Dubois laid before the Society a specimen of Australian gold, in grains, from Mount Alexander.

Until within a few months, no specimen of gold from Australia could be obtained by the mint, except by sending to the London market. Recently, however, there have been four parcels brought hither for coinage, amounting to about \$14,000. The sample herewith shown is from one of those parcels, and is from the well-known mining district of Mount Alexander, about 70 miles north of Port Philip, and 500 miles south-west from Sydney. The grains are quite different in shape from those of California, being more globular or shot-like; and the proportion of accompanying oxide of iron, and extraneous substances, is found to be less by the loss in melting. That loss scarcely exceeds $1\frac{1}{2}$ per cent. on the average, while the best shipments of gold from California will average double that loss. There is also a conspicuous difference in the amount of silver alloy present. The particles from Australia varied from 960 to 966 thousandths in fineness; the California gold may be said to average 875 to 885; making a difference in favour of the Australian gold, of about ten per cent. in value.

The value of the latter, in the unmelted grains, may be stated at \$19.67 per ounce; after melting, twenty dollars per ounce, within a few cents.

Mr. Fraley mentioned, in connection with this subject, that a workman in the chemical manufactory of Mr. Lennig, in this city, had obtained gold by washing from the sand on the bank of the Delaware river, near Bridesburg, about five miles above Philadelphia. The gold thus obtained, by a day's labour, was worth about twenty-five cents.

On motion of Mr. Trego, it was resolved that the Secretary be instructed to communicate to Mr. George Parish, the thanks of the Society for the liberality of his family in relinquishing their claim to the collection of coins and medals deposited with the Society by the late David Parish, in the year 1816;—and that he be directed to return to Mr. George Parish, the two medals mentioned in his letter read this evening, which the family wish to retain.

Mr. Trego, as Reporter, presented No. 48 of the Proceedings of the Society, recently published.

The Society then proceeded to the stated business of the meeting,—the consideration of the proposed amendments to the Laws of the Society,—and resolved itself into a committee of the whole, Judge Kane in the chair, for the purpose of considering the said amendments.

After some time the Committee rose, and the Chairman reported the draft submitted to them, with sundry amendments, which report was agreed to;—and it was then ordered that the further consideration of the amendments be postponed until the next stated meeting of the Society.

Stated Meeting, February 18.

Present, seventeen members.

JUDGE KANE, Vice-President, in the Chair.

Letters were read:-

From the Hon. John P. Kennedy, dated Washington, Feb. 5, 1853, acknowledging the receipt of notice of his election to membership of this Society:—

From the Royal Academy of Sciences at Stockholm, dated Oct. 30, 1852; and from the Royal Society of Sciences at Upsal, without date,—accompanying donations to this Society,—and acknowledging the receipt of Transactions and Proceedings:—

From the Connecticut Historical Society, dated Hartford, August 14, 1852; from Col. H. K. Craig, dated Ordnance Office, Washington, Feb. 9, 1853; from Wm. B. Reed, Esq. at the request of Lord Mahon, dated Feb. 16;—announcing donations for the Library:—

From the American Antiquarian Society, dated Worcester, Mass. Feb. 8, 1853; and from the New Jersey Historical Society, dated Newark, Feb. 12, 1853,—returning thanks for No. 48 of the Proceedings: and—

From Mr. George Parish, dated Ogdensburg, N. Y. 13th Feb. 1853, acknowledging the receipt of the two medals forwarded to him by the Society, as directed at the last meeting.